SRR Entrance Criteria

1. Timing Considerations
   1.1. If applicable, has an Alternative Systems Review (ASR) been successfully completed?
   1.2. Is the program ready to conduct an SRR based upon SRR entry criteria vice a pre-determined schedule date?
   1.3. Have all prior technical review Requests for Action (RFA)s been properly dispositioned, and closed?
   1.4. Have all prior logistics review RFAs been properly dispositioned, and closed?
   1.5. Is the program using an effective Integrated Digital Environment (IDE) to store data?
2. Planning
   2.1. Was a chairperson assigned in coordination with the buying activity?
   2.2. Did the review agenda address all applicable SRR Review Elements?
   2.3. Was a Systems Engineering Plan (SEP - formerly Systems Engineering Management Plan (SEMP)) developed and implemented?
   2.4. Was the Systems Engineering Technical Review Board properly staffed, and did the appropriate competencies participate in the review?
   2.5. Was a Manpower Estimate Report completed and approved? (ACAT I only)
   2.6. Have the KPPs and other performance requirements, both explicit and derived been defined, quantified and documented?
   2.7. Is Operational Availability (A_o) a Key Performance Parameter (KPP)?
   2.8. Was the acquisition strategy developed and documented?
   2.9. Is there an approved T&E Strategy?
   2.10. If this is a joint program, who is designated as the lead test agency?
   2.11. If this is a joint program, are operating agreements (MOAs/MOUs) in place?
   2.12. Does planning reflect Integrated Test Team (ITT) organization and testing (contractor / Developmental test (DT) / Operational test (OT)?
   2.13. Does the contract specification contain performance requirements to satisfy Human Systems Integration (HSI) requirements for each domain addressed in the Capability Development Document (CDD), including minimum performance requirements for those domains not specifically addressed in the CDD?
3. Program Schedule
   3.1. Is the schedule reflective of available resources?
   3.2. Is there adequate time allotted in the program's schedule for T&E?
   3.3. Will Early Operational Assessments (EOAs)/ Operational Assessments (OAs) be conducted early in the test program?
   3.4. Does the program schedule have an identified critical path?
   3.5. Is the critical path consistent with overall technical risk, and are the critical path tasks based upon the preferred system concept and system specification?

3.6. What is the program status versus Critical Path?
4. Management metrics relevant to life cycle phase
   4.1. Cost / Schedule / Performance / KPP – Status versus Plan. Is the latest revised estimate of each KPP in accordance with the Acquisition Program Baseline? Are the KPPs reflective of program risks and technical results?
   4.2. Has the Cost Analysis Requirements Description (CARD) been developed, and is it consistent with the system specification and latest estimates of costs?
   4.3. If applicable, does the CARD reflect the planned test program?
   4.4. Latest estimate of development costs – Is the estimate consistent with the technical risk of the program, the programs critical path plan, and available resources?
   4.5. Based on latest cost estimate, is the T&E program adequately funded?
   4.6. Earned Value Management (EVM), if applicable
       4.6.1. Is the EVM data up-to-date?
       4.6.2. Is the EVM baseline being used as an program execution tool (i.e. by management and at the working level)?
       4.6.3. Are the work packages based on earned value vice level of effort?
       4.6.4. Is the EVM data consistent with known technical risks and challenges in the program?
       4.6.5. Are the EVM data being used to adjust program resources to address risk issues?
   4.7. Is the Work Breakdown Structure (WBS) consistent with the cost account structure and the Program Plan/SEP?
   4.8. Are software metrics, particularly sizing, known for each software element of the system concept?
5. Program Staffing
   5.1. Is there a complete organization structure shown and is the organization consistent with the technical challenges/risks of the program?
   5.2. Are key government / contractor interfaces identified and are these consistent with program risks?
   5.3. Is the Supportability Integrated Product Team (SIPT) adequately staffed with representatives from appropriate functional disciplines?
   5.4. Is adequate staffing (required expertise and quantity of expertise) available to execute the schedule?
   5.5. Is there confidence that all required flight clearance performance monitors are involved and concur with the system requirements?
   5.6. Is there an assigned T&E IPT Lead with the appropriate career field training?
   5.7. Does the program have an assigned DT representative?
   5.8. Does the program have an assigned OT representative?
   5.9. Are current and future T&E staffing plans developed and adequately funded?
6. Processes, as applicable
   6.1. Program Management processes as detailed in the Program Management Plan – Are the program management processes that are in

place adequate to address the technical challenges of the program and adequate to address program risks?

    6.1.1. Is there an updated Program Management Plan that is reflective of the emergent technical issues and risks?

    6.1.2. Are there Program Management processes in place to properly manage the system requirements and attendant technical emphasis areas?

    6.1.3. Is the program being managed to adjust resources? To address issues?

6.2. Configuration Management (CM) processes as detailed in the Configuration Management Plan

    6.2.1. Is the CM plan in place and up-to-date? (if available)

    6.2.2. Is the system requirement for each configuration item (CI) documented and being managed in accordance with the CM Plan?

    6.2.3. Are changes to the managed CI configurations controlled and tracked to higher level (System Specification and CDD/ORD), and lower level (system requirements) documents?

6.3. Systems Engineering processes (EIA-632, etc.) as detailed in the Systems Engineering Plan (SEP)

    6.3.1. Is there a defined system engineering process?

    6.3.2. Are the processes shared by the government and contractor (if applicable) team?

    6.3.3. Are the planned technical reviews in place and properly placed (event driven vice schedule driven)?

    6.3.4. Are the SE processes adequate to support the technical requirements of the technical reviews? Are the technical teams working against a defined technical baseline?

    6.3.5. Is there a HSI IPT and/or an active HSI Working Group (to include Project Management, Logistics, Engineering, other) assigned for this procurement?

    6.3.6. Is there a comprehensive HSI plan or equivalent, IAW DOD 5000.2 to optimize total system performance?

    6.3.7. Will funding be sufficient throughout the Program Objectives Memorandum (POM) cycle to allow all aspects of the HSI plan to be implemented in this phase and any future acquisition phase for this program?

    6.3.8. Is HSI included in the SOW, CDRLS, CLINS and sources sought ?

    6.3.9. Is there an electromagnetic environmental effects (E^3) IPT and/or active E^3 Working Group or Electromagnetic Compatibility Assessment Board) (EMCAB) assigned for this procurement?

6.4. Requirements Management

    6.4.1. Is there a process in place for requirements management and is it being applied to properly address this stage of the program?

    6.4.2. Are requirements being managed and traced from higher level (parent) requirements to lower level (offspring) requirements?

    6.4.3. Are there any orphan or childless requirements?

6.4.4. Is adequate requirements traceability in place to ensure compliance with the CDD/Capability Production Document (CPD - formerly ORD) at OT&E?

6.4.5. Are both effectiveness and suitability requirements being addressed in the systems requirements?

6.4.6. Do analyses of preliminary designs and processes indicate that identification and management of Critical Safety Items are being considered at the system level and are being flowed down to the subsystem and component levels?

6.5. Risk Management processes as detailed in the Risk Management Plan

6.5.1. Is there a defined risk management process? Is the Risk Management Plan up to date and being used?

6.5.2. Is the risk management process shared by the government and contractor (if applicable) team?

6.5.3. Does the risk management process properly track all risks on a continuous basis and provide for update of the mitigation approaches?

6.5.4. Are T&E members utilizing the program risk management system?

6.5.5. Are mitigation approaches in place for all yellow and red risks? Are risk mitigations resourced?

6.5.6. Does the risk management process provide for risk updates to support the technical reviews and program management (acquisition) reviews?

6.6. Test processes as detailed in the Test and Evaluation Master Plan (TEMP)

6.6.1. Has a TEMP been developed?

6.6.2. Are all test events traceable to system requirements Initial Capabilities Document (ICD)/CDD to Specification to TEMP)?

6.6.3. Does the TEMP clearly address all KPPs?

6.6.4. Has the A_o portion of test plans been defined or updated for this phase of the program?

6.6.5. Have facilities/test resources (government and contractor) been defined and included in the planning?

6.6.6. Are there sufficient test assets (e.g. test aircraft, ground test articles, System Integration Labs (SILs)) to conduct the planned test program?

6.6.7. Are resource providers (facilities/people/equipment) included in test planning?

6.6.8. Are T&E personnel involved in the requirements development to ensure testability?

6.6.9. Is there User buy-in to the above test planning? Are there provisions for User participation?

6.6.10. Have test organizations bought into TEMP development?

6.6.11. Are HSI metrics incorporated into the program's Test & Evaluation activities?

6.6.12. Does projected TEMP approval date support acquisition milestone?

6.6.13. Is the interoperability KPP testing planned and resources identified?

6.6.14. Do DT and OT test events in TEMP reflect planned system maturity?

6.6.15. Have appropriate modeling and simulation tools been identified?

6.6.16. Has contractor submitted a detailed T&E strategy as part of contract deliverables?

6.7. Has the program team accessed and applied Knowledge Management lessons learned?

6.8. Does the Program Acquisition Strategy include full life-cycle support planning and address actions to assure sustainment and continuous improvement of product affordability?

6.9. Has the Acquisition Logistics Support Plan (ALSP) been updated to reflect the Support Concepts developed during the Concept & Technology Development phase?

6.9.1. Does the ALSP reflect/document evaluation of alternative logistics concepts and support system trade-off results?

6.9.2. Have operational user reviews and comments been appropriately considered?

6.10. Has the program office prepared a Logistics Requirements and Funding Summary (LRFS)?

6.10.1. Is there adequate documentation to support the requirements identified in the LRFS?

6.10.2. Do the funding requirements in the LRFS coincide with the support requirements in the ALSP and other planning documents?

6.10.3. Are the impacts of funding shortfalls understood and plans in place to mitigate risk?

6.10.4. Has the LRFS been staffed and approved?

7. FORCEnet (system of systems maritime information architecture) Compliance Checklist

7.1. Below are only high level topics. It is necessary to utilize the most current checklist for more detailed breakdown of requirements and address all requirements applicable to the program at this stage of development.

7.2. Conforms with FORCEnet Operational Requirements (Ref FORCEnet Initial Capabilities Document (ICD), FORCEnet Report to Congress (RTC))

7.2.1. Compliant with the FORCEnet Capabilities-Based Operational Requirements (CBOR) Compliance Action List (CAL)

7.2.2. Maps to and supports the FORCEnet Capabilities List (FCL)

7.3. Conforms with FORCEnet System/Technical Requirements (Ref FORCEnet Architectures and Standards, Volumes I & II, CJCSI 6212.01)

7.3.1. Compliant with FORCEnet Architectures and Standards (A&S) CAL

7.3.2. Open Architecture, and supports Open Architecture Computing Environment (OACE)

7.3.3. Internet Protocol (IP) based and IPv6 compatible by 2008, or provides reasonable transition plan

7.3.4. Complies with DoD-directed Architectures; e.g., Global Information Grid (GIG), GIG Net-Centric Operations & Warfare (NCOW) Reference Model, Joint Technical Architecture (JTA)

7.3.5. Conforms with DoD/Joint Initiatives; e.g., Transformational Communications Architecture (TCA), GIG Bandwidth Expansion (GIG-BE), Teleports, Net-Centric Enterprise Services (NCES), Joint Tactical Radio System (JTRS), Family of Interoperable Operational Pictures (FIOP), Single Integrated Air Picture (SIAP), Joint Battle Management Command & Control (JBMC^2)

7.3.6. Compatible with approved ISR Architectures

7.4. Conforms with FORCEnet Support/Policy Requirements (Ref CJCSI 6212.01)

7.4.1. Compliant with Human Systems Integration (HSI) CAL

7.4.2. Addresses Bandwidth (BW) and related issues, including throughput requirement and options to mitigate BW, adequate class/quality of service, and life-cycle cost of commercial Satellite Communications (SATCOM) BW and terrestrial leased connectivity

7.4.3. Compliant with Spectrum Management (SM) CAL

7.4.4. Compliant with Information Assurance (IA) CAL

7.4.5. Compliant with National/Space (N/S) policy

7.4.6. Compliant with Department Chief Information Officer (CIO) policy

7.5. Conforms with FORCEnet Implementation Requirements (Ref CJCSI 3170.01, CJCSI 6212.01, and DODD/I 5000.1)

7.5.1. Compliant with Chairman, Joint Chiefs of Staff (CJCSI) Instructions and Joint Interoperability (JI) CAL (See added details item 8 below)

7.5.2. Compliant with Department of Defense Directives/Instructions (DODD/I)

8. Battlespace engineering requirements per Joint Capabilities Integration and Development System (JCIDS) Chairman of the Joint Chiefs Of Staff Instruction CJCSI 3170.01D 12 March 2004

8.1. Has coordination among Department of Defense (DOD) Components, international systems from allies and cooperative opportunities been accomplished to achieve substantive improvements in joint warfighting and interoperability in the battlespace of the future?

8.2. Assess existing and proposed capabilities in light of their contribution to future joint concepts. The process must produce capability proposals that consider the full range of doctrine, organization, training, materiel, leadership and education, personnel and facilities (DOTMLPF) solutions in order to advance joint warfighting.

8.3. Potential solutions may include a family of systems (FoS) that takes different approaches to filling the capability gap, each addressing operational considerations in a different way. Alternatively, the capability may require a system of systems (SoS) approach to fill a capability gap.

The FoS and SoS materiel solutions may also require systems delivered by multiple sponsors/materiel developers.

8.4. Review the Functional Solution Analysis (FSA) to confirm and document approach solves (or mitigates) one or more of the capability gaps (needs) identified in the Functional Needs Analysis (FNA).

9. The process to identify capability gaps and potential solutions must be supported by a robust analytical process which incorporates innovative practices - including best commercial practices, collaborative environments, modeling and simulation and electronic business solutions.

10. System Requirements

10.1. Are system requirements traced to the Capability Development Document (CDD - formerly ORD)?

10.2. For the overall system, the following system requirements should be assessed, as applicable:

10.2.1. Have the KPPs and other performance requirements, both explicit and derived been defined, quantified and documented?

10.2.2. Have all of the explicit and derived system requirements and system constraints been documented in the system specification?

10.2.3. Are derived requirements (Critical Technical Parameters (CTPs) / Critical Operational Issues (COIs)) traceable to system requirements?

10.2.4. Have airworthiness requirements been addressed and documented in the system specification?

10.2.5. Have Reliability, Maintainability and Built-in Test (BIT) requirements been addressed in the system requirements?

10.3. Address the below areas similarly

10.3.1. Electromagnetic Environmental Effects (E^3) and Spectrum Supportability

- Does the CDD address spectrum certification compliance, spectrum supportability, host nation approval, the control of E^3, and safety issues regarding the hazards of electromagnetic radiation to ordnance (HERO)?
- Have analyses been completed and submitted for all RF spectrum dependent equipment?
- Have Electromagnetic Spectrum Supportability Assessment Factors requirements been completed and submitted to the Department CIO for spectrum supportability approval to support a MS B decision ?
- Has an Integrated design analysis/study been initiated? [1]
- Has the intended Operational Electromagnetic Environment (EME) been defined? [2]
- Have all the box-level requirements of MIL-STD-461E been addressed?

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[1] If adding an antenna or aperture to a ship's topside environment, an analysis is necessary.
[2] MIL-STD-464A defines typical EMEs

- Have all the system-level requirements of MIL-STD-464A been addressed? [3]
- Does the program schedule allow adequate time between prototyping and first flight to conduct flight worthiness EMI testing?
- Does the program schedule allow adequate time to correct EMI deficiencies prior to production start?
- Has the requirement and funding for a facility for EMI/EMC demonstration testing been established?
- Are E3 and spectrum management included in the SOW, CDRLS and CLINS as appropriate?

10.3.2. Producibility

10.3.3. Human System Safety - Does the design (new, baseline, modification) require any of the following analyses?
- Preliminary Hazard,
- Operating and Support Hazard,
- Safety Assessment Reports,
- Hazard Tracking and Risk Solutions

10.3.4. Aeromechanics

10.3.5. Structures

10.3.6. Materials

10.3.7. Human Systems Engineering - Have the following Human Systems Engineering Requirements been considered in the system requirements?
  - Human Performance and error avoidance
  - Human Interfaces
  - Has the program developed training systems plans to maximize use of new learning techniques, modeling and simulation technology, embedded training, and instrumentation systems that provide anytime, anyplace training and reduce the demand on the training establishment?
    - Was a Training System Requirements Analysis conducted?
    - Were embedded training capabilities considered?
  - Design for Usability?
  - Design for Maintainability?
  - Task and equipment Standardization?
  - Aviation life support/aircrew escape and survival
  - Has the Systems Engineering plan been updated to include A_o related information appropriate for this phase?

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[3] This includes electrical bonding, precipitation static (P-static), electrostatic discharge (ESD), subsystem EMI (including COTS and NDI), intra-system EMC, inter-system EMC and High Intensity radiated Fields (HIRF), lightening effects (direct and indirect), radiation hazards (HERO, HERP and HERF), TEMPEST and Electromagnetic Pulse (EMP) effects and life-cycle E3 hardening.

10.3.8. Habitability - Have the following Habitability Requirements been considered in the system requirements?
- Quality Of Life?
- Quality of Work?
- Environmental Limits and Control?
- Personnel Services?

10.3.9. Survivability - Have the following Survivability Requirements been considered in the system requirements?
- Anti-Fratricide?
- Personnel Protection?
- Damage Control?
- Performance Effects of Ensembles?

10.3.10. Environment, Safety and Occupational Health (ESOH) - Has the following ESOH Requirements been considered in the system requirements?
- Accident Avoidance?
- Safety Hazard Avoidance?
- Health Hazard Avoidance?
- Risk Mitigation?
- Medical?

10.3.11. Have all logistics requirements been considered in the system requirements?

10.3.11.1. Have logistics support planning documents been updated to include A_o related information appropriate for this phase?

10.4. Have the support cost drivers been identified?

10.4.1. Has Supportability been considered in the system requirements?

10.4.1.1. Have Supportability analysis planning documents been updated to include A_o related information appropriate for this phase?

10.4.2. Has the production readiness review been performed to include an assessment of the system supportability requirements?

10.4.3. Does Post Production supportability analysis identify items that are single/dual source or those for which the Government cannot obtain data rights and the associated corrective action plan?

10.4.4. Have the diagnostics requirements been addressed in the system requirements?

10.5. Has Condition Based Maintenance + been identified as the desired concept?

10.5.1. Maintenance Planning

10.5.1.1. Has the initial maintenance concept been substantiated by Level of Repair Analysis and documented in the ALSP?

10.5.1.2. Has the Maintenance Concept/Planning document been updated to include A_o related information appropriate for this phase?

10.5.2. Have requirements been identified for:

10.5.2.1. Special Skills

10.5.2.2. Maintenance and operator labor hours by rate by year.

10.5.2.3. Number of personnel by rate, by maintenance level, by year.

10.5.3. Have requirements for manpower factors that impact system design utilization rates, pilot to seat ratios and maintenance ratios been identified?

10.5.4. Have maintenance task items, maintenance skill levels and number of maintenance personnel required been derived from the following:

- Reliability (e.g. MTBF).
- Maintainability (e.g., MTTR, Maintenance task times.)
- Availability (e.g., task time limits).
- Reliability and maintainability tests.
- Performance monitoring/fault detection/fault isolation and diagnostics.
- Test conducted under representative operating conditions.

10.5.5. Have initial estimates of depot capability/capacity and resource requirements been made and documented?

10.5.6. Have funding requirements for interim support, transition planning, and establishment of organic capability been identified and documents in the LRFS?

10.6. Manpower & Personnel and Training (MP&T)

10.6.1. Does the ALSP reflect the results of the Training planning Process Methodology (TRPPM) analysis?

10.6.2. Has a Training Systems Plan (TSP) been developed and validated?

10.6.3. Were the threshold requirements from the Capabilities Product Document (CPD)/Capabilities Development Document (CDD) used in the development of the manpower, personnel, and training requirements?

10.6.4. Does the explanation of manpower requirements clearly articulate qualifications and skills required?

10.6.5. Is there a Required Operational Capabilities (ROC)/Projected Operational Environment (POE)(or equivalent planning parameters) that addresses this system? Do the manpower requirements in the TSP support the ROC/POE?

10.6.6. Does the TSP reflect the most current manpower requirements data available? Are all billet requirements, designators, occupational specialty codes, and ratings identified in the TSP?

10.6.7. Are training course requirements identified?

10.6.8. Are training requirements documented for DT&E and OT&E?

10.6.9. Is the acquisition strategy for Training Equipment and Devices (TE&D) documented?

10.6.9.1. Are the MP&T requirements consistent with the Supportability Analysis and level of repair prescribed in the maintenance concept?

10.6.9.2. Do the tasks identified link to functions that are traced to Mission Essential Task Lists (METLS) and Joint Mission Essential Task Lists (JMETLS)?

10.6.9.3. Does the LRFS reflect funding for course and materials development factory training and TE&D?

10.7. Supply Support

10.7.1. Has the maintenance philosophy and level of repair been established?

10.7.2. Has a Supply Support Management Plan been developed?

10.7.3. Has the type of repair (e.g., inspect/repair as necessary, disposal or overhaul) been specified?

10.7.4. Have Performance Based Logistics concepts been incorporated as the preferred supply support strategy?

10.7.5. Have Material Support Date (MSD) and Operational Support Date been determined and the requirements for Interim Contractor Supply Support (if any) identified?

10.7.6. Is provisioning technical documentation being ordered in the SDD contract?

10.7.7. Are initial sparing analysis and modeling assumptions consistent with the prescribed maintenance concept?

10.7.8. Are spares, provisioning technical documentation, interim contractor support, etc. reflected in the LRFS?

10.7.9. Have sparing to availability curves been developed for the program, using an approved Reliability-Based Support (RBS) model?

10.7.10. Have organizational level spares been identified based on approved RBS models?

10.7.11. Are all spares required to support the users readiness requirement budgeted? If not, what is the percent funded? What A_o will the budget support?

10.7.12. Has adequate funding for replenishment been identified?

10.8. Support Equipment

10.8.1. Are the critical testability issues identified in the TEMP?

10.8.2. Are the GFP requirements for test defined?

10.8.3. Does the LRFS document funding requirements for required support equipment?

10.8.4. Does the ALSP document the plan for the development and deployment of Test Program Sets, Maintenance Assistance Modules, and Test Requirement Documents?

10.8.5. Are the requirements for the SDD contractor to deliver Support Equipment Recommendation Data (SERD) clearly identified?

10.8.6. Have support equipment integration issues been identified and coordinated with administrative sponsors and program managers?

10.9. Technical Data

10.9.1. Is technical data being acquired in digital electronic form enabling life-cycle support using digital operations?

10.9.2. Have Technical Data Package (TDP) requirements been identified and documented in the ALSP?

10.9.3. Are limited or government-purpose data rights being procured?

10.9.4. If commercial items are being procured, has the potential effect on technical manual and engineering drawing development been considered and mitigated?

10.9.5. Is the level of technical data being procured consistent with levels of repair prescribed in the maintenance concept?

10.9.6. Is the SDD contractor required to deliver source data packages for technical manuals and weapons loading manuals in time to support Test and Evaluation events?

10.10. Computer Resources

10.10.1. Has the Computer Resources Support (CRS) concept been documented in a Computer Resources Life Cycle Management Plan (CRLCMP), or as a part of the ALSP?

10.10.2. Has the Computer Resources Working Group (CRWG) been established?

10.10.3. Has the Supply Support Activity (SSA) been designated and personnel training, and facility requirements identified?

10.10.4. Are unique system features, use of off-the-shelf software, application of industry standards, and the relationship of the system architecture to Department standards documented and methods of risk management identified?

10.10.5. Has the project set up an Integrated Digital Environment (IDE) to allow every activity involved with the program to cost effectively create, store, access, manipulate and/or exchange A_o, systems engineering and supportability analysis data?

10.10.6. Is planning in place to obtain data rights and licenses to make software available for re-use or export to other Government programs?

10.11. Facilities

10.11.1. Have MILCON requirements been identified in the LRFS?

10.11.2. Does the ALSP include analysis conducted to determine facility requirements?

10.11.3. Is there a Facilities Requirements Document and a schedule to conduct Site Surveys?

10.11.4. Has a Proposed Military Improvement (PMI) document been prepared and forwarded to the administrative sponsor to identify required ship alteration?

10.11.5. Is the facilities requirement development process integrated with the supportability analysis process?

10.11.6. Has the Basic Facilities Requirements (BFR) document been developed in accordance with the appropriate documents using the systems logistics support requirements?

10.11.7. Have existing assets at each impacted support activity been evaluated (e.g. site survey) to determine if they can be used to satisfy

the BFRs associated with the new or modified system? If they are not suitable is the rationale documented and has an analysis of viable support alternatives been done to develop a solution for providing adequate facilities to support delivery of the system. Alternatives to be considered are:

- Outsourcing (contractor operates Government owned facilities)
- Privatization (Government buys services and relinquishes all interest including real estate and personal property)
- Leasing
- Repair/renovation/conversion of existing assets to satisfy requirements.
- New construction to provide required capability

10.11.8. If repair/support facilities cannot be completed in time to meet mission requirements and satisfy the BFR, has a designated source of repair/support or work around been identified and received fleet concurrence?

10.11.9. Has the program assessed (e.g. site surveys and trade studies) all means of satisfying a facility requirement prior to selecting the use of Military Construction (MILCON) appropriations.

10.11.10. Have the estimates of facility requirements and associated cost been refined and has detailed project documentation and cost estimates been developed?

10.11.11. How is documentation of design related trade-studies maintained in contractor databases?

10.11.12. Does the government have documented plans to review this data?

10.12. Packaging, Handling, Storage & Transportation (PHS&T)

10.12.1. Have potential PHS&T related problems been identified and are risk mitigation plans in place?

10.12.2. If new hazardous materials are being introduced, are PHS&T plans adequate to meet statutory and regulatory requirements?

10.12.3. Does the LRFS identify PHS&T funding requirements?

10.13. Design Interface (Reliability, Maintainability & Availability)

10.13.1. Are reliability and maintainability requirements adequately specified in the system specification and the TEMP?

10.13.2. Are DT and OT communities in agreement on the test methodology for reliability and maintainability requirements?

10.13.3. Does the ALSP identify when Failure Modes, Effects and Criticality Analysis (FMECA) will be conducted and integrated with the Supportability Analysis program?

10.13.4. Is reliability development testing (test, analyze and fix) planned for SDD phase?

10.13.5. Are Built In Test (BIT) and diagnostics requirements adequately specified in the system specification and TEMP?

10.13.6. Is there a mechanism established for logisticians, engineers and cost analysts to exchange data pertaining to the elements of system

design and formal methods in place to review and document system design changes for impact on logistics support and program life-cycle cost?

10.14. Interoperability - Will the envisioned system be interoperable with all required elements?

    10.14.1. Interoperability - Is JITC involved with the DT/OT testers?

    10.14.2. Have all aspects of Integration/Interface been considered in the system requirements (functional and physical interfaces)

    10.14.3. Are the system requirements testable? Are there plans in place to cover verification via other means as required (analysis, simulation, etc.) Is there buy-in among all stakeholders as to these approaches?

    10.14.4. For Computer/Software CIs, is there sufficient functional detail to enable detailed design (i.e. development of program performance specifications) from which coding can occur?

    10.14.5. For the overall system, and each Configuration Item, have the following system constraints been addressed in the system performance requirements?

    10.14.6. Have Physical Interfaces been considered in the systems performance requirements? Have proper tradeoffs been made?

    10.14.7. Has development cost been considered in the system requirements?

    10.14.8. Have production cost budgets been established and have these been considered in the system requirements?

    10.14.9. Have operations and support costs been considered in the system requirements?

    10.14.10. Have weight budgets been established for all CIs?

    10.14.11. Has CI weight and its impact of overall system weight been considered and properly traded?

    10.14.12. Volume Budget?

    10.14.13. CI Volume impact?

    10.14.14. Power Budget?

    10.14.15. CI Power impact?

    10.14.16. Cooling Budget?

    10.14.17. CI Cooling impact?

    10.14.18. Available technology / system growth – Have the requirements for technology insertion and system growth been allocated to the CIs and reflected in the system requirements?

    10.14.19. Has the platform diagnostics integration been addressed in the system requirements?

    10.14.20. Has Risk been considered at the CI level?

10.15. Subsystem Test Plan – Are the system requirements of each CI consistent with the subsystem test planning and approach?

11. Analysis Methods and Tools:

11.1. Has the program identified and documented a standard methodology for conducting A_o analysis?

11.2. Is the methodology consistent with DoD/service guidelines?

11.3. Is the methodology consistent with best commercial practices and within the budget and programmatic limitations?

11.4. What is/are the definitive references(s) for the program methodology for A_o? Where is the method described?

11.5. Has the program team identified a single or a family of models for conducting A_o analysis?

    11.5.1. What parametric (top-down) model(s) have been selected?

    11.5.2. What engineering estimate (bottoms-up) model(s) have been selected?

    11.5.3. Where is this information documented?

11.6. Are the same methods and models used by all (contractor and government) agencies that perform/conduct decision support analysis for A_o for this program?

    11.6.1. If not how has the program insured that consistent results are being achieved and that analysis can be replicated?

11.7. Have analysis methods and tools selected for use on this program been evaluated by an outside agency?

    11.7.1. Where is this documented?

12. Analysis Ground Rules and Assumptions:

12.1. Has the program identified standard ground rules and assumptions for use by all agencies supporting program analysis?

    12.1.1. Are man-hour rates for operators and maintainers defined?

    12.1.2. Are operating hour's per/system/per/year defined?

    12.1.3. Are production, deployment schedules defined?

    12.1.4. Are site stand-up schedules defined?

    12.1.5. Are the phase-in and phase-out for (new/old) systems defined?

    12.1.6. Are technology refreshment schedules defined?

    12.1.7. Has the economic life (for analysis purposes) been defined?

    12.1.8. Has the Design Reference Mission Profile (DRMP) been defined?

    12.1.9. Where are the ground rules and assumptions documented and how do all analysis agencies obtain this information?

    12.1.10. Have all initial production and recurring support costs been included in the analysis capability

    12.1.11. Are ALL future costs covered to include customer costs,

- Contractor costs,
- Supplier costs,
- Third-Party Provider costs,
- Direct/Indirect costs,
- Variable/Fixed costs,
- Design and development costs,
- Production/Construction costs,
- Operation and Support costs,
- Retirement and Material recycling/Disposal costs?

    12.1.12. Have any costs or logistics elements been identified for elimination from any specific analysis

    12.1.13. Has the rationale been documented, and if so, where?

12.1.14. Have all Funding shortfalls been identified and prioritized?

12.1.15. What rate of cannibalization will be allowed in analyzing A_o for this program?

12.1.16. Has the effect of cannibalization on equipment reliability (accelerated wear-out), maintenance-induced failures, and manpower turnover been included in the analysis?

12.1.17. Has the rate(s) of cannibalization versus spares costs been documented?

12.1.18. Has the user been briefed and agreed to this aspect of analysis?

12.2. Have planning factors been reviewed and approved by applicable agencies such as DoD, CNO and relevant others?

12.3. Has the full set of ground rules, assumptions and related analysis factors been provided to all analysis agencies (including the contractor)?

12.4. Have the A_o related objectives and thresholds been defined?

12.4.1. Has analysis been updated for this phase of the program?

12.4.2. Has A_o tracking been analyzed appropriately for this phase?

12.4.3. Is there any need to re-baseline the program objectives and thresholds using CAIV guidelines?

12.5. Are detailed design related A_o drivers being identified at the appropriate WBS for this phase?

13. Program Risk Assessment

13.1. Have risk items in the system requirements been defined and analyzed?

13.2. How has risk analysis been incorporated in to A_o analysis?

13.3. Is the risk assessment process tightly coupled with the technical effort and reflective of the technical risks inherent in the system requirements?

13.4. Has the risk assessment addressed future risks to development?

13.5. Is there adequate buy-in among the technical team as to risks?

13.6. Have cost and schedule impacts been defined for mitigation options?

13.7. Is the technical risk assessment being shared at all levels of the Program Team?

13.8. Have supportability and logistics risk items been defined, analyzed, and included in the Program Risk Assessment?

13.9. Have cost and schedule impacts for supportability and logistics risk mitigation been documented and identified in the LRFS?

14. Completion/Exit Criteria

14.1. Were SRR issues captured in RFAs and properly adjudicated and assigned?

14.2. Were all SRR RFAs properly completed (closed)?

14.3. Were the proper buying activity competencies represented at the review?

14.4. Can the system requirements, as disclosed, satisfy the CDD/ORD?

14.5. Are the system requirements sufficiently detailed and understood to enable system functional definition and functional decomposition?

14.6. Is there an approved System specification?

14.7. Are adequate processes and metrics in place for the program to succeed?

14.8. Are the risks known and manageable for design and development?

14.9. Is the program schedule executable within the anticipated cost and technical risks?

14.10. Is the program properly staffed?

14.11. Is the program non-recurring engineering (NRE) executable within the existing budget?

14.12. Is the preliminary CARD consistent with the approved system specification?

14.13. Is the software functionality in the system specification consistent with the software sizing estimates and resource loaded schedule?

14.14. Did the Technology Development (TD) (formerly Component Advanced Development) work effort sufficiently reduce development risks?

14.15. Does the status of the technical effort indicate contract compliance?

14.16. Are there significant issues outside the scope of the contract?

14.17. Has the A_o portion of the Acquisition Program Baseline (APB) been defined or updated for this phase of the program?

14.18. Has the A_o related portion of exit criteria (in terms of CAIV objectives)

14.19. Is there any way to make A_o analysis more accurate for this program at this time?

14.20. Have other program planning documents been updated to include A_o related information appropriate for this phase? What are they?